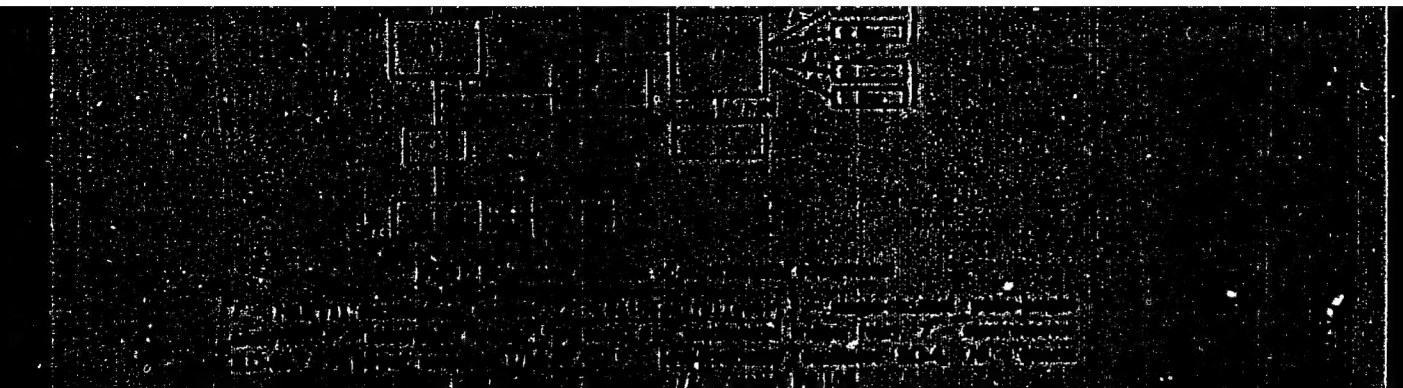


"APPROVED FOR RELEASE: 06/13/2000

CIA-RDP86-00513R000722720016-4



APPROVED FOR RELEASE: 06/13/2000

CIA-RDP86-00513R000722720016-4"

9293-66 EWT(1)/EWT(m)/I/EWP(t)/EWP(b)/ENA(c) IJP(c) JD/WH/GG
 ACC NR: AP5026405 SOURCE CODE: UR/0386/65/002/006/0269/0274
 AUTHOR: ^{44, 55} Alekseyevskiy, N. Ye.; ^{44, 55} Kir'yanov, A. P.; ^{44, 55} Nishankovskiy, V. I.; ^{44, 55} Samarskiy, Yu. A.
 ORG: Institute of Physics Problems, Academy of Sciences SSSR (Institut fizicheskikh problem Akademii nauk SSSR)
 TITLE: Anisotropy of the Mossbauer effect in single crystals of tin at low temperatures
 SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki. Pis'ma v redaktsiyu. Prilozheniye, v. 2, no. 6, 1965, 269-274
 TOPIC TAGS: Mossbauer effect, tin, single crystal, ^{21, 44, 55} resonance absorption, temperature dependence
 ABSTRACT: The authors report the results of measurements of resonant absorption of recoilless 23.8-keV γ rays produced by the decay of $\text{Sn}^{119\text{m}}$ in single crystals of tin, in the temperature interval 4.2--280K. The measurements were made with a setup in which the absorber was caused to move at constant speed relative to the source, using a specially shaped eccentric (Fig. 1). The γ -ray source was an SnO_2 compound ~30 mg/cm² thick; the collimator diameter was 7 mm. The x-radiation was applied through a filter of palladium foil 60 μ thick. During measurements the source was always kept at $\leq 77\text{K}$. The absorbers were plates with orientations [001] and [100] cut from single-crystal tin enriched with Sn^{120} and containing 1.7% Sn^{119} . The apparatus and

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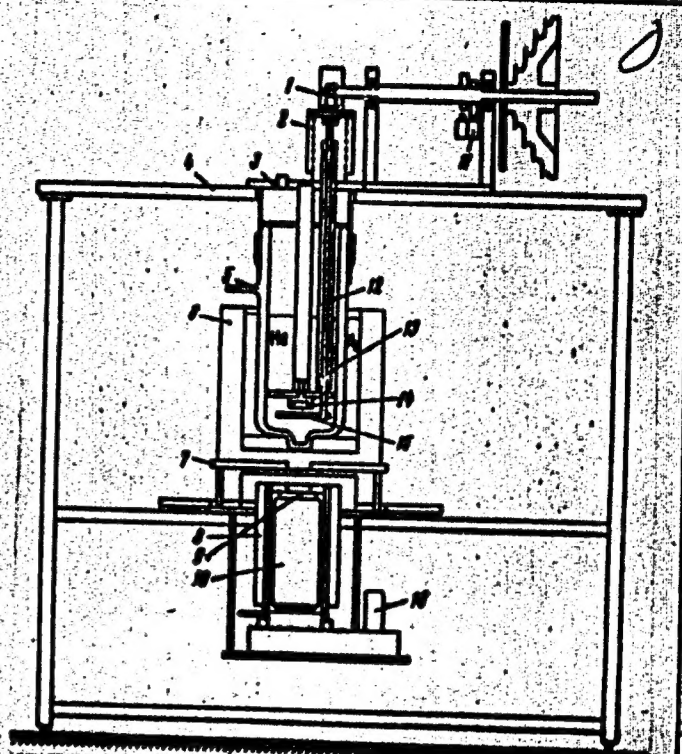
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ACC NR: AP5026405

Fig. 1. Over-all view of the installation.

- 1 - Eccentric cam, 2 - bellows,
- 3 - cap, 4 - mounting stand, 5 -
- helium Dewar, 6 - container for
- liquid nitrogen, 7 - lead screen,
- 8 - thermostat, 9 - NaI(Tl) crys-
- tal, 10 - FEU-13 photomultiplier,
- 11 - commutator, 12 - stem, 13 -
- stuffing box, 14 - radiation source,
- 15 - absorber, 16 - high-voltage
- supply.



Card 2/3

L 9293-66

ACC NR: AP5026405

procedure are described briefly. Typical resonance absorption curves and the temperature dependence of the amplitude of the maximum absorption are presented. The experimental data were reduced by a procedure described earlier (G. A. Rykov and Phan Zuy Hien, ZhETF v. 43, 909, 1962). By using large statistics, a stronger source, better instrumental geometry, and single-crystal samples, the authors were able to establish the presence of anisotropy of the Mossbauer effect at 4.2K. The magnitude of the anisotropy was found to be (1.08 ± 0.02) , and to go through an inversion in the region $T = (40 \pm 5)K$. The temperature dependence of the Mossbauer-effect anisotropy can probably be attributed to an overlap of the optical and acoustical branches of the phonon spectrum of tin. Orig. art. has: 3 figures and 1 table.

SUB CODE: 20/ SUM DATE: 20Jul65/ ORIG REF: 003/ OTH REF: 002

CC
Card 3/3

KIR'YANOV, B.S.

2.1.3.9

Author: KIR'YANOV, B.S. Title: Investigation of a Good Fuel Element of the First Nuclear Power Station

Periodical: Atomnaya energiya, 1960, Vol. 6, No. 3, pp. 446-447

Text: In the present paper the authors give a report on investigations of the isotope composition, the burning and the state of the shell of used fuel elements of the first nuclear power station (First Nuclear Power Station) of the Soviet Union. The fuel elements investigated had been briefly described. A thin film was found on the outer shell, but no damage was observed. The outer shell was examined by means of a radioisotope at various places, and results of the examination are given. The average over the entire length of the element as a function of the distance from the top is 0.02 ± 0.02 and was found. An investigation

Investigation of a Good Fuel Element of the First Nuclear Power Station

of the outer shell showed that it had a burn deposit (about 10-15%) which was identified as an intermediate (and not as a reaction product of shell). The burning was determined according to the ^{60}Co activity. This isotope was specially well suited because of its long half-life. The most burning associated to 12-15% in the case of the element (from bottom to top). Taken at a distance of 95 cm from the lower end of the element (about 10 cm from the top), the burning was determined macroscopically by means of a detector. In these samples was 4.32%, which corresponds to a burning of 16.18. Fig. 2 shows the distribution of the entire α , β , and γ radiation along the element (from bottom to top). The transmission coefficient was determined according to the alpha spectra and the number of spontaneous fissions. Fig. 3 shows the distribution of the isotope ^{238}Pu , ^{239}Pu , and ^{240}Pu along the fuel element. The ^{238}Pu , ^{239}Pu , and ^{240}Pu content is given in a table (2.34-10⁻⁴, 1.20, 0.702, 1.47, 10⁻⁴, 1.46-10⁻³) and is compared with several theoretical

Investigation of a Good Fuel Element of the First Nuclear Power Station

data. The authors finally thank B. N. Kuznetsov and B. N. Ivanov for the macroscopic analysis of the irradiated material, and V. N. Kuznetsov for calculating the isotope composition. There are 3 figures, 1 table, and 2 references: 1 Soviet and 1 American.

Submitted: January 28, 1960

Card 3/3

26.2230

29547
S/089/61/011/005/012/017
B102/B104

AUTHORS: Smirnov-Averin, A. P., Calkov, V. I., Sheynker, I. G.,
Meshcheryakov, V. P., Stabenova, L. A., Kir'yanov, B. S.

TITLE: Determination of burnup in spent fuel elements

PERIODICAL: Atomnaya energiya, v. 11, no. 5, 1961, 454 - 456

TEXT: The burnup of spent fuel elements was determined by determining the Cs^{134} accumulated as a result of an (n, γ) reaction with the stable isotope Cs^{133} , and Cs^{137} . The activity of the mixture $\text{Cs}^{134} + \text{Cs}^{137}$ was measured by scintillation gamma and beta spectrometers and a γ - β coincidence circuit. The apparatus gamma spectrum of the mixture had two photopeaks, the first was caused by the gamma radiation of Cs^{134} ($\bar{E}_\gamma = 0.80$ Mev), the second by a superposition of the photopeaks of Cs^{137} ($\bar{E}_\gamma = 0.66$ Mev) and Cs^{134} ($\bar{E}_\gamma = 0.59$ Mev). The internal conversion coefficient was determined from the beta spectrum of Cs^{137} to be 0.119

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Determination of burnup...

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S/089/61/011/005/012/017
B102/B104

in accordance with the tabulated value. β - γ coincidences of the isotope mixture were only due to Cs^{134} radiation. From intensity and coincidence counting rate measurements the relative Cs^{137} content in the mixture was determined. The distribution of both the single isotopes and the mixture along the fuel rod had broad maxima in the middle of the rod. The burnup distribution was calculated from the Cs^{137} content. It was found to be in good agreement with mass-spectrometric measurements. The burnup may also be determined from the content of the To^{99} fission fragment ($2.2 \cdot 10^5$ years) which is produced in a yield of 6.02%. This isotope, which is the only long-lived one of this element, is extracted by methyl ethyl ketone after dissolving the material and centrifuging the precipitate. For final purification the cationite KY-2 (KU-2) is used. Activity is determined with a 4 π counter. The burnup determined from To^{99} was 67%, from the cesium mixture 68%, and from mass-spectrometric measurements 66.2%. There are 5 figures and 2 references: 1 Soviet and 1 non-Soviet. The latter reads as follows: Progress in Nuclear Energy, Ser. III, Process Chemistry, V. I, Appendix III, London, 1956.
SUBMITTED: September 13, 1960
Card 2/2

SMIRNOV-AVERIN, A.P.; GALKOV, V.I.; SHEYNKER, I.G.; MESHCHERYAKOV, V.P.;
STABENOVA, L.A.; KIR'YANOV, B.S.

Determining the burn-up in spent fuel rods. Atom.energ. 11
no.5:454-456 N '61. (MIRA 14:10)
(Nuclear fuels),

43468

S/089/62/013/006/016/027
B102/B186

21 5210

AUTHORS: Kir'yanov, B. S., Smirnov-Averin, A. P., Galkov, V. I.

TITLE: Accumulation of technetium in thermal reactors

PERIODICAL: Atomnaya energiya, v. 13, no. 6, 1962, 595 - 597

TEXT: Technetium, predominantly used as inhibitor in semiconductor engineering, was separated in considerable amounts from the fuel elements of the Pervaya atomnaya elektrostaniya (First Atomic Power Plant) where it has accumulated from fission of U^{235} , Pu^{239} , and Pu^{241} . Its production from Mo^{99} by β^- decay is negligible ($< 1\%$). The concentration of Tc^{99} in the fuel elements of this plant is calculated considering U^{235} and $Pu^{239,241}$ fission as well as the storage effect. The calculated curve is compared with the measured values in Fig. 1. There are 2 figures.

SUBMITTED: March 17, 1962

Card 1/2

KIR'YANOV, B.S.; SMIRNOV-AVERIN, A.P.; GALKOV, V.I.

Accumulation of technetium in thermal reactors. Atom.energ.
13 no.6:595-597 D '62. (MIRA 15:12)
(Nuclear reactors) (Technetium)

KIM'YANOV, E. A. (Director of the Veterinary Bacteriological Laboratory of the Maritime Territory [Primorskii Krai]).

"Observations of Leptospirosis in Swine in the Maritime Territory."
Veterinariya vol. 38., no. 11., November 1961., p. 43

KIR'YANOV, G.F.

Philosophic principles of V.V. Dokuchaev's scientific work.
Pochvovedenie no.10:8-18 '60. (MIRA 13:10)

1. Moskovskiy energeticheskiy institut.
(Dokuchaev, Vasil' Vasil'evich, 1846-1903)

KIR'YANOV, G.F.

Some problems of the theory of knowledge in works by V.V.
Dokuchaev. Pochvovedenie no.1:17-29 Ja '65.

(MIRA 18:7)

1. Moskovskiy institut radiotekhniki i gornoy elektromekhaniki.

KIR'YANOV, G.I.

Tularemia foci in the alpine zone of the Altai. Dokl. Irk. gos.
nauch.-issl. protivochum. inst. no.5:5-8 '63 (MIRA 18:1)

PIR'IMOV, G.I.

Range and distribution of mice in various habitats of the I. of
Territory. Dokl. Irk. gos. nauch.-issl. protivochum. ust. no. 13
124-128 '63 (1964, 1965)

KIR'YANOV, G.I.

Present-day tendencies in activation analysis. Atom. energ.
19 no.6:561-564 D '65. (MIRA 19:1)

KIR'YANOV, G.I.

Voles of the Altai Territory and their economic and epizootological significance. Izv. Alt. otd. Geog. ob-va SSSR no.5:184-186 '65.

(MIRA 18:12)

1. Irkutskiy protivochumnyy institut.

AGAFOV, S.L.; ALEKSEYEVA, A.N.; BELLYUSTINA, L.N.; GOLOV, I.I.;
GUSEV, O.V.; DMITRIYEVA, V.I.; YEVLANPIYEVA, F.A.;
YELISEYEV, A.I.; ZHAVORONKOV, N.A.; ZPARKOV, S.A.;
KIR'YANOV, I.A.; KRAYNOV, L.A.; KUSTOV, K.L.; LBOV, F.A.;
LIPATOV, N.A.; LIPOVETSKIY, I.A.; MALYUGIN, V.N.; MARINOV,
N.N.[deceased]; MIKHAYLOV, A.N.; POTAPOVA, Ye.D.;
TRUKHMANOV, G.A.; UKHIN, V.A.; FILIPPOV, V.A.; CHEBURASHKIN,
A.M.; SHKOTOV, A.T.; GARANINA, L.F., kand. fil. nauk

[The city of Gorkiy; a guidebook] Gorod Gor'kii, Volgo-
Viatskoe knizhnoe izd-vo, 1964. 374 p. (MIRA 17:12)

KIR'YANOV K. G.

В. В. Гуров

Методы измерения доплеровского смещения радиочастоты сигналов движущихся объектов в фазе бегущей

В. А. Савин

О свойствах радиосигналов в дальномерных системах, работающих в фазе бегущей волны

В. В. Козлов

Измерение дальномерности объектов радиолокационной системой

А. В. Яковлев

Свойства радиосигналов радиолокационной системы, работающих в фазе бегущей волны

Г. А. Савин

Измерение стабильности амплитудного сигнала при доплеровском смещении частоты

В. В. Гуров
(с 10 до 22 часов)

А. Г. Савин

Методы измерения радиочастоты объектов движущихся

20

В. В. Гуров

Методы измерения радиочастоты объектов движущихся в фазе бегущей

А. В. Савин

В. В. Козлов

Измерение дальномерности объектов радиолокационной системой, работающих в фазе бегущей волны

В. В. Гуров

Измерение радиочастоты объектов движущихся в фазе бегущей волны

В. В. Гуров

Измерение радиочастоты объектов движущихся

В. В. Гуров

Измерение радиочастоты объектов движущихся в фазе бегущей волны

В. В. Гуров
(с 10 до 16 часов)

report submitted for the Centennial Meeting of the Scientific Technological Society of
Radio Engineering and Electrical Communications in. A. G. Pospelov (VSEI), Moscow,
8-12 June. 1959

L 11754-66 EWT(d)/EWP(v)/EWP(k)/EWP(h)/EWP(l) ~~14~~
 ACC NR: AP6011917 SOURCE CODE: UR/0141/66/009/002/0324/0335

AUTHOR: Kir'yanov, K. G. 68
B

ORG: none 14

TITLE: Effect of random inputs on the adaptive system

SOURCE: IVUZ. Radiofizika, v. 9, no. 2, 1966, 324-335

TOPIC TAGS: automatic control, automatic control system, automatic control theory,
 ADAPTIVE CONTROL, RANDOM NOISE SIGNAL

ABSTRACT: In a previous author's work (IVUZ. Radiofizika; 8, 589, 1965), simple periodic conditions existing in an adaptive control system were studied. The present article investigates, by means of a z-transform, the effect of random noise on an N-input adaptive system. Formulas for the dispersions of the system variables, such as storage content and storage voltage, are developed. The formulas were verified by a numerical example calculated on a "Razdan" computer. "The author wishes to thank Yu. I. Neymark for the direction of this project." Orig. art. has: 4 figures, 60 formulas, and 1 table.

SUB CODE: 13, /7 / SUBM DATE: 22Jun65 / ORIG REF: 004 / OTH REF: 001

Cord 1/1 UDC: 62-506

L 01308-67

ACC NR: AP6014230

SOURCE CODE: UR/0115/66/000/003/0063/0065

47
B

AUTHOR: Kir'yanov, K. G.

ORG: none

TITLE: Measuring weak quasi-sinusoidal signals and phase shifts at SHF \downarrow

SOURCE: Izmeritel'naya tekhnika, no. 3, 1966, 63-65

TOPIC TAGS: SHF, SHF communication, signal detection

ABSTRACT: Accurate measurement of the level and phase of a quasi-sinusoidal SHF signal is based on a coherent reception method and a (amplitude and phase) compensation IF measuring method. The corresponding apparatus comprises a superheterodyne receiver that has two inputs (measuring channel and phase-lock AFC channel) and a common frequency-controlled heterodyne oscillator. The phase-lock channel provides a compensating voltage with separate amplitude and phase controls and also a reference voltage needed for the coherent receiver. Block diagrams of the above equipment are explained. Experimentally determined best sensitivities, at 25-2000 Mc and a noise factor of 3-25, are: 10^{-16} - 10^{-18} w for a remote source and

Card 1/2

UDC: 621.317.373

L 01308-67

ACC NR: AP6014230

0

$10^{-17} - 10^{-20}$ w for a local source. Under remote-source conditions, the minimal lock-in band that secures noiseless operation of the phase-lock AFC system is 300-50000 cps depending on the spurious frequency deviations of the oscillators. Under local-source conditions, the lock-in band is 0.1-1 Mc, which permits using a time constant of 1 sec (1-cps passband). Orig. art. has: 2 figures and 10 formulas.

SUB CODE: 17, 09 / SUBM DATE: none

Card 2/2

[Handwritten signature]

KIR'YANOV, K.G.

Synthes with self-regulation. Izv. vyzn. i tekh. nauk. 8
no. 3:589-604 '59. (MIRA 18:8)

KIR'YANOV, M.

Civil air defense for the individual. Voen. znan. 25 no.10:8
0 '49. (MIRA 13:3)
(Air defenses)

KIR'YANOV, M. G.

USSR/Physics of the Atmosphere - Dynamic Meteorology, M-2

Abst Journal: Referat Zhur - Fizika, No 12, 1956, 36101

Author: Kir'yanov, M. G.

Institution: None

Title: The Foehn at Southern Crimea in 30-31 March 1952

Original

Periodical: Meteorol. i gidrologiya, 1955, No 3, 34-36

Abstract: An investigation was made of the course of the meteorological elements during the time of the foehn in Yalta and Alushta and the synoptic conditions of the phenomenon. The author relates the foehn with the process of the secondary orographic cyclogenesis in the western stream over southern Crimea and the Black Sea under the influence of the Crimean Mountains. The dry and warm air on the northwest periphery of the orographic cyclone came down on southern Crimea, was heated adiabatically, and reached the shore in the form of a northwest foehn stream with a velocity of 12-20 m/sec. The downward stream on the leeward

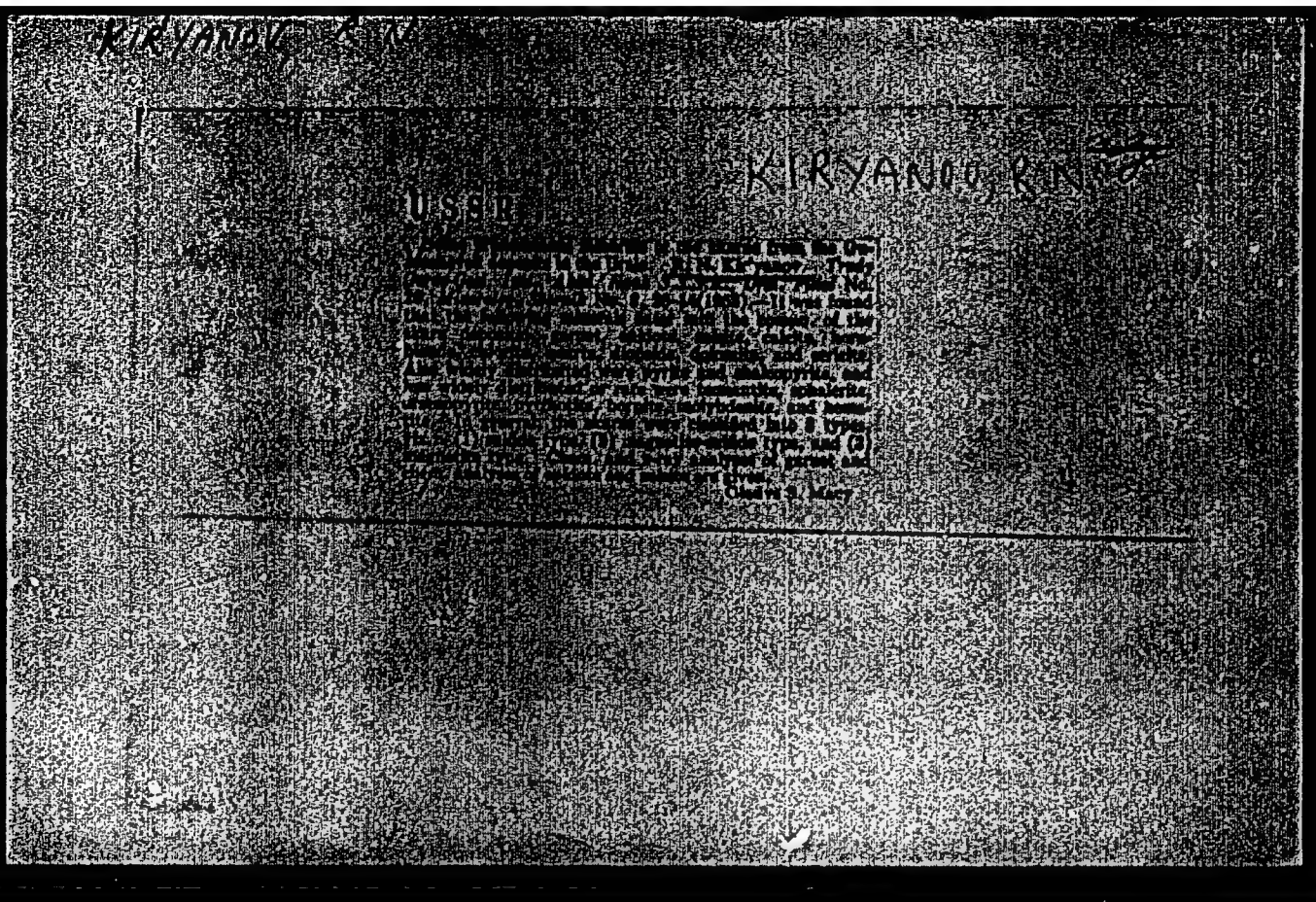
Card 1/2

USSR/Physics of the Atmosphere - Dynamic Meteorology, M-2

Abst Journal: Referat Zhur - Fizika, No 12, 1956, 36101

Abstract: side of the range had its origin in the free troposphere on the level of the range, in other words, the orographic cyclone has sucked into its region masses of air from the Yayla. The sharpness of the rise in the temperature (15-16° rise in Alushta) is explained by the fact that an inversion of the temperature was also observed prior to the foehn at Ay-Petra and that the temperatures in Ay-Petra and on the surface of the 850 mb surfaces were higher than Yalta and Alushta.

Card 2/2



KIR'YANOV, V.

The work has become more purposeful. Fin. SSSR 38 no.1:68-70 Ja '64.
(MIRA 17:2)

1. Zaveduyushchiy Korovogradskim sel'skim oblastnym finansovym otделom.

KIRILLOV, V.I., 1974, V.I.

Statistical theory of nonequilibrium processes at the metal-
electrolyte interface. Statistical theory of the electrochemical
double layer. Dokl. AN SSSR 239 no.11:1704-1707, 1974.

1. Institut elektrokhemii i fiz. khim. predmetov, Leningrad
A.N. Khandriyev.

KIR'YANOV, V.A., Cand Phys-Math Sci--(diss) "Application of the
method of correlative functions to the theory of a double electric layer
and to certain other problems of ^{of} static equilibrium." Mos, 1953.
8 pp (Min of Higher Education USSR. Non-engineering-Phys Inst), 100 co-
pies. Bibliography at end of text (13 titles) (K1,25-58,107)

-14-

KIR'YANOV, V.A.; LEVICH, V.G.

Theory of an electric double layer at the boundary of a
metal - electrolyte interface. *Nek.vop.inzh.fiz.* no.3:5-
27 '58. (MIRA 12:5)
(Surface chemistry) (Electrolytes)

LEVICH, V.G.; KIR'YANOV, V.A.

Contribution to the theory of strong electrolyte solutions.

Zhur.fiz.khim. 36 no.8:1646-1654 Ag '62. (MIRA 15:8)

1. Institut elektrokhimii AN SSSR.
(Electrolyte solutions)

S/020/60/135/006/026/037
B004/B056

26.1620

AUTHORS: Levich, V. G., Corresponding Member AS USSR Kir'vany, V. A.
and Krylov, V. S.

TITLE: Effects of the Discrete Nature of the Charge and Properties
of the Double Layer on the Metal-Charge Interface (Taking
Account of the Discrete Structure of the Charge of
Specifically Adsorbed Layers of Ions)

PERIODICAL: Doklady Akademii nauk SSSR, 1960, Vol. 135, No. 6,
pp. 1425 - 1428

TEXT: From various papers by other research workers the authors conclude
that the model of an electric double layer with uniformly "smeared out"
charge does not correspond to the experimental results. In the present
paper, they give a report on a quantitative investigation of the effects
of discrete charges of the electric double layer on the metal - solution
interface. The following equations are written: for the potential jump in
the layer of adsorbed anions at the point of the electrocapillary maximum;
 $\delta\psi_a = \psi_0 = -4\pi\sigma/D$ (5), and in the case of a charged interface as a result
Card 1/3

87410

Effects of the Discrete Nature of the Charge S/020/60/135/006/026/037
and Properties of the Double Layer on the B004/B056
Metal-Charge Interface (Taking Account of the Discrete Structure of the
Charge of Specifically Adsorbed Layers of Ions)

of the charge q of the metal: $\delta\psi = \psi_0 - \delta\psi_a + \delta\psi_q$; $\delta\psi_q = -4\pi q(\beta + \gamma)/D$ (6).

σ denotes the average charge in the adsorbed layer; D is the dielectric constant of the internal region; β is the minimum distance between metal and anion, and $\beta + \gamma$ is that between metal and cation. For the micro-potential of the point charges the following relation is obtained:

$\psi^A = \psi_{is} + [\gamma/(\beta + \gamma)](\delta\psi_a + \delta\psi_q)$ (10), where $\psi_{is} \approx (e/D\gamma)\ln 2$. Provided the surface of the electrode is not too largely occupied, equation (10) agrees well with experimental data. For the dependence of the potential jump $\delta\psi_a$ on the concentration and activity a_{\pm} of the anions,

$\delta(\delta\psi_a)/\delta \ln a_{\pm} = (RT/F\delta\psi_a) - [\delta\psi^A/\delta(\delta\psi_a)]^{-1}RT/F$ (12) is found. An estimate of the values of β and γ from the data on ionic radii, and a calculation from equation (12) gave good agreement with the experimental data on the mercury - solution interface. The authors thank A. N. Frumkin for a discussion. There are 13 references: 7 Soviet, 3 US, 3 British, and

Card 2/3

87410

Effects of the Discrete Nature of the Charge S/020/60/135/006/026/037
and Properties of the Double Layer on the B004/B056
Metal-Charge Interface (Taking Account of the Discrete Structure of the
Charge of Specifically Adsorbed Layers of Ions)

1 German.

ASSOCIATION: Institut elektrokhemii Akademii nauk SSSR (Institute of
Electrochemistry of the Academy of Sciences USSR)

SUBMITTED: September 26, 1960

Card 3/3

KIR'YANOV, V.A.

Theory of diffusion in solutions of strong electrolytes (calculating ion association). Zhur.fiz.khim. 35 no.10:2389-2391 0
'61. (MIRA 14:11)

1. Akademiya nauk SSSR, Institut elektrokhimii.
(Diffusion) (Electrolyte solutions)

LEVICH, V.G.; KIRILYANOV, V.A.; KRYLOV, V.I.

Properties of the double layer and the characteristic of the
electrostatic adsorption of ions. Dokl. AN SSSR 155 no. 3:
662-665 Mr '64. (MIRA 17:5)

1. Chlen-korrespondent AN SSSR (for Levich).

LEVICH, V.G.; KHAYKIN, B.I.; KIR'YANOV, V.A.

Faraday impedance for reversible electrode processes proceeding
according to the pattern of hydrogen catalytic evolution. Dokl.
AN SSSR 139 no.4:925-928 Ag '61. (MIRA 14:7)

1. Institut elektrokhemii AN SSSR. 2. Chlen-korrespondent AN SSSR
(for Levich).
(Polarization (Electricity)) (Electromotive force)

LEVICI, V.G. [Levich, V.G.]; KIR'YANOV, V.A. [Kir'yanov, V.A.]

Statistic theory of the solutions of strong electrolytes. Analele
chimie 18 no.2:94-104 Apr-Je '63.

KIR'YANOV, V.A.; FILINOVSKIY, V.Yu.

Study of the kinetics of electrode processes by means of
alternating currents on a rotating disk electrode. Zhur. fiz.
khim. 37 no.9:2122-2124 S '63. (MIRA 16:12)

1. Institut elektrokhimii AN SSSR.

FILINOVSKIY, V.Yu.; KIR'YANOV, V.A.

Contribution to the theory of nonstationary convective
diffusion on a rotating disk electrode. Dokl. AN SSSR
156 no.6:1412-1415 Je '64. (MIRA 17:8)

1. Institut elektrokhemii AN SSSR. Predstavleno akademikom
A.N. Frumkinym.

NEPOMNYASHCHIY, S.I.; KIR'YANOV, V.I.

Hanging up maps and geographical pictures with the help of permanent magnets. Geogr. v shkole 25 no.2:58-59 Mr-Ap '62. (MIRA 15:2)
(Geography--Audio-visual aids)

NEPOMNYASHCHIY, S.I.; KIR'YANOV, V.I.

Device for hanging maps, poster, and illustrations with the help
of permanent magnets. Khim. v shkole 17 no.1:85-86 Ja-F '62.
(MIRA 15:1)

(Schools—Furniture, equipment, etc.)

SPERANSKIY, B.A., kand. tekhn. nauk; KIR'YANOV, V.T., inzh.

Assembling ore loading grab cranes by large blocks. Stroil. prom.
36 no. 7:13-16 J1 '58. (MIRA 11'8)

1. Treest Uralstal'konstruktsiya.
(Cranes, derricks, etc.)

KIR'YANOV, V.V.

Age of Kanilovka layers in the Dniester Valley. Dop. AN URSSR
no.7:915-918 '65. (MIRA 18:8)

1. Institut geologicheskikh nauk AN UkrSSR.

OONEVCHUK, N.A.; SOROKIN, F.G.; KALMANOV, N.Ye.; KIR'YANOV, Yu.A.

Horizontal slicing and filling mined areas with rubble concrete.
Biul. TSIIN zavet. met. no.6:2-5 '58. (MIRA 11:7)
(Mining engineering)

KIR'YANOV, Ye.A.

Leptospirosis in cattle. Veterinariia 40 no.7:14-15 J1 '63.
(MIRA 16:8)

1. Direktor Primorskoy krayevoy veterinarno-bakteriologicheskoy
laboratorii.

(Maritime Territory--Leptospirosis)
(Maritime Territory--Cattle--Diseases and pests)

KIR'YANOV, Ye.A.

Observing leptospirosis of swine in the Maritime Territory.
Veterinariia 38 no.11:48-49 N '61 (MIRA 18:1)

1. Direktor Primorskoy krayevoy veterinarno-bakteriologicheskoy
laboratorii.

KIR'YANOV, Ye.A.

Abortion in swine with a leptospiral etiology. Veterinariia 39
no.1:31 Ja '63. (MIRA 16:6)

1. Direktor Primorskoy krayevoy veterinarno-bakteriologicheskoy
laboratorii.
(Leptospirosis) (Abortion in animals) (Swine--Diseases and pests)

KIR'YANOV, Yu.A., gornyy inzh.

Suspended concrete lining used in shaft sinking. Gor.zhur. no.4:
74 Ap '64. (MIRA 17:4)

1. Rudnik "Kansay", Leninabad.

VAL'BE, S. P.; KIR'YANOV, Yu. G.; SMIRNOV, L. N.

Tectonics of the eastern Kopet-Dag foothills in connection
with oil and gas prospects. Trudy Inst. geol. AN Turk. SSR 3:
137-143 '60. (MIRA 16:1)

(Kopet-Dag—Petroleum geology)
(Kopet-Dag—Gas, Natural—Geology)

VAL'BE, S.P.; KIR'YANOV, Yu.G.; SMIRNOV, L.N.

Geology, and oil and gas potentials of the eastern Kopet-Dag. Geol.
nefti i gaza vol. 4, no. 4:9-13 Ap '61. (MIRA-1415)

1. Yugo-vostochnaya Karakumskaya geologicheskaya ekspeditsiya
Upravleniya geologii i okhrany nefti Turkmenской SSR.
(Kopet-Dag—Petroleum geology) (Kopet-Dag—Gas, Natural—Geology)

SERYI, Yu.I., kand. ist. nauk, otv. red.; IVANOV, L.M., doktor
ist. nauk, red.; KIR'YANOV, Yu.I., kand. ist. nauk,
red.; KUZNETSOV, V.I., kand. ist. nauk, red.;
KHLISTOV, I.P., kand. ist. nauk, red.

[Papers at the October 1963 academic session in Rostov-
On-Don devoted to the history of the working class in
Russia during the period of capitalism] Doklady na nauch-
noi sessii, posviashchennoi istorii rabochego klassa Rossii
v period kapitalizma Rostov-na-Donu, 1963 g. Rostov-na-
Donu, AN SSSR, 1963. 106 p. (MIRA 17:5)

1. Nauchnaya sessiya, posvyashchennaya istorii rabochego
klassa Rossii v period kapitalizma, Rostov-on-Don, 1963.
2. Institut istorii AN SSSR (for Ivanov). 3. Rostovskiy
gosudarstvennyy universitet (for Seryi).

KIR'YANOVA, A.I.; CHITAKHOVA, M.S.

Joint conference of research institutes on the problem of
influenza. Zdrav.Tadzh. 6 no.3:41-42 My-Je '59.

(MIRA 12:11)

(INFLUENZA RESEARCH)

KIR'YANOVA, A.I.

Serum diagnosis of focal influenzal diseases. Zdrav.Tadzh. 9
no.5:12-15 '62. (MIRA 15:12)

1. Iz otdela virusologii (zav. - L.G.Rapoport) Dushanbinskogo
instituta epidemiologii i gigiyeny.
(SERUM DIAGNOSIS) (DUSHANBE--INFLUENZA)

KIR'YANOVA, A.I.

Study of influenza virus strains, type A2, by the use of
hemagglutination retention reaction. Vop.virus. 7 no.6:738
N-D '62. (MIRA 16:4)
(VIRUSES) (BLOOD—AGGLUTINATION) (INFLUENZA)

KIR'YANOVA, A.M.

GORODETSKAYA, R.V., kandidat khimicheskikh nauk; KIR'YANOVA, A.M.,
nauchnyi sotrudnik.

Rapid method of determining the moisture of raw hides. Leg.prom.
14 no.9:38-39 S '54. (MLRA 7:9)
(Hides and skins)

Kir'yanova, R.M.

GORODETSKAYA, R.V., kandidat khimicheskikh nauk; GAYDUKOVA, Z.V.; KIR'YANOVA,
A.M.

Determining the degree of moisture in raw hides. Leg.prom.15 no.10:
31 0 '55. (MLRA 9:1)
(Hides and skins)

KIR'YANOVA, A.M.

GORODETSKAYA, R.V.; KIR'YANOVA, A.M.; YANKOVSKAYA, M.V.

Rapid determination of nitrogen content in samples of raw hide
and leather. Leg.prom. 17 no.4:41-42 Ap '57. (MIRA 10:4)
(Leather industry--Quality control)

GORODETSKAYA, R.V.; KIR'YANOVA, A.M.; YANKOVSKAYA, M.V.

New procedures for reception and delivery of skins for manufacturing
stiff leather. Leg. prom. 18 no.8:22-23 Ag '58. (MIRA 11:9)
(Hides and skins)

GORODETSKAYA, R.V.; KIR'YANOVA, A.M.

New method of determining the comparable efficiency of antiseptics
for raw leather. Kozh.-obuv.prom. 4 no.4:28-30 Ap '62.
(MIRA 15:5)

(Leather--Preservation)

KIRIVALOVA, I. S., SHAROV, M. N.

"Hygienic problems of planning and building settlements."

report submitted at the 13th All-Union Congress of Hygienists, Epidemiologists
and Infectionists, 1959.

L 05723-67 EWT(d) IJP(o)

ACC NR: AP6018118

SOURCE CODE: UR/0141/65/008/003/0589/0604

AUTHOR: Kir'yanov, K. G.

ORG: none

TITLE: One system with self-adjustment

SOURCE: IVUZ. Radiofizika, v. 8, no. 3, 1965, 589-604

TOPIC TAGS: computer, control system stability, self adaptive control/BESM-2 computer

ABSTRACT: Using the method of point transformations, the author studies the behavior of an adaptive system under the influence of external periodic interactions. Following the formulation of the problem and the classification of the periodic motions of the system, the article discusses the fixed transformation points and their functional relationship with the parameters, studies the stability behavior, generalizes the procedures to a more universal law for input signal processing, and studies the system under the action of several specific signal shapes (pure sinusoidal with single and multiples inputs and with various phase relationships). The most general case of processing jointly the system of input signals and the content of the memory is considered. Results were checked by comparing them with a simulated system specially programmed for the BESM-2 computer. They were found in excellent agreement.

The author thanks Yu. I. Neymark for directing the work and discussing the results.

Orig. art. has: 8 figures and 53 formulas. [JPRS]

SUB CODE: 13, 09 / SUBM DATE: 01Jun64 / ORIG REF: 002 / OTH REF: 001

Card 1/1 *pla*

UDC: 62-506

SOV/51-7-2-21/34
AUTHORS: Pivovarov, V.M., Kir'yanova, L.A., Bobovich, Ya.S. and Tarkhov, G.Y.

TITLE: Photoelectric Recording of Raman Spectra Excited with the
 $\lambda = 5875 \text{ \AA}$ Line from a Helium Lamp (Fotoelektricheskaya registratsiya
spektrov kombinatsionnogo rasseyaniya, возбужденных линий
 $\lambda = 5875 \text{ \AA}$ гелиевого лампы)

PERIODICAL: Optika i spektroskopiya, 1959, Vol 7, Nr 2, pp 258-259 (USSR)

ABSTRACT: A 3000 V, 0.2 A cold-cathode spiral helium lamp working under glow-discharge conditions at $P_{He} = 2 \text{ mm Hg}$, was employed to excite the Raman spectrum (the 5875 \AA line was used). The spectra were obtained by means of a high-speed monochromator with a diffraction grating. A photomultiplier FxU-27 was used as a receiver. This photomultiplier was sensitive to about 7000 \AA and was, therefore, able to record vibrational lines with frequencies $\sim 1600 \text{ cm}^{-1}$. The signal from the photomultiplier was amplified and recorded using appropriate parts of a spectrometer DFS-12. Fig 1 shows the spectrum of iodoxybenzene obtained in this way. The reproducibility of the results and the

Card 1/2

SOV/51-7-2-21/34

Photoelectric Recording of Raman Spectra Excited with the $\lambda = 5875 \text{ \AA}$ Line from a Helium Lamp

resolution are illustrated on the $1004\text{-}1030 \text{ cm}^{-1}$ doublet of toluene and the $999\text{-}1017 \text{ cm}^{-1}$ doublet of iodoxybenzene (Fig 2). The first doublet (Fig 2a) is completely resolved, the second (Fig 2b) is resolved to the extent of about 80%. There are 2 figures and 4 references, 1 of which is Soviet, 2 English and 1 international.

SUBMITTED: January 24, 1959

Card 2/2

39686

S/051/62/013/001/004/019

E039/E420

24.3100

AUTHORS: Kir'yanova, L.A., Pivovarov, V.M., Yakovlev, S.A.

TITLE: The excitation of combination scattering in the orange and red regions of the spectrum

PERIODICAL: Optika i spektroskopiya, v.13, no.1, 1962, 79-82

TEXT: Description is given of a powerful low voltage helium lamp, intended for the excitation of combination scattering spectra in the orange and red regions of the spectrum. The discharge tube is 40 mm in diameter and constructed from 3C-5K glass, working length 120 mm, with oxide coated electrodes and designed for a working current of 8 to 10 A. Near each electrode is an auxiliary trigger electrode. The intensity of the He 5875 Å line is shown to decrease steadily as the helium pressure is increased, the best conditions being obtained at about 2 mm, with a working voltage of 150 to 170 V. The intensities of the 5875, 6678, 7065 and 7281 Å lines all increase linearly with current over the range 2 to 9 A. A rough spectrum of the spectral energy distribution is given: taking the 5875 Å lines as 100, the 6678, 7065 and 7281 Å lines are 14.1, 8.1 and 2.6 respectively. Card 1/2

The excitation of combination ...

S/051/62/013/001/004/019
E039/E420

Using photoelectric and photographic recording the spectrum of o-nitroaniline in acetone ($C = 1.3$ mole/litre) is obtained and compared with the data of J. Behringer for o-nitroaniline in CCl_4 solution. No agreement is obtained over the range observed, i.e. ~ 350 to 1600 cm^{-1} . The spectrum of CCl_4 excited by the He lines 5875, 6678 and 7065 \AA is also examined (only anti-Stokes region). There are 5 figures and 2 tables. ✓

SUBMITTED: May 19, 1961

Card 2/2

KIR'YANOVA, L.A.; PIVOVAROV, V.M.; YAKOVLEV, S.A.

Excitation of the Raman effect in the orange and red spectral
regions. Opt.i spektr. 13 no.1:79-82 J1 '62. (MIRA 15:7)
(Raman effect)

KIR'YANOVA, L.F.; PAVLIN, A.V.

Maintenance of standards at the Kirov Leather and Fur Works.
Standartizatsia 26 no.1:62-63 Ja '62. (MIRA 15:1)
(Kirov--Leather industry--Standards)

KURAYTIS, S.A.; GOLUBEVA, S.K.; KORMYUKHINA, M.A.; KIR'YANOVA, L.F.

Characteristics of goatskin leather tanning with chromium salts
in the presence of cation-active compounds. Nauch.-issl.trudy
TSNIKP no.32:22-28 '60. (MIRA 15:12)
(Tanning) (Surface-active agents)

QADYUN, G.N.; BEL'NEVA, I.P.; LEVINA, M.V.; KIR'YANOV, N.I.

Experience in the production of classified groups of
by a simplified technology with the application of ultrasonic
waves and use of the available factory equipment. Trudy INIIPP
5:28-32 1964. (KGB 1961)

KIR YANDOVA, N A

PHASE I BOOK EXPLOITATION

BOV/5583

17

Podkletnov, Ye. N., Stalin Prize Winner, ed.

Emal' i protsessy emalirovaniya (Enamels and Enameling Processes) Moscow, Mashgiz, 1961. 113 p. 4,000 copies printed.

Sponsoring Agency: Gosudarstvennyy nauchno-tekhnicheskiy komitet Soveta Ministrov UkrSSR. Institut tekhnicheskoy informatsii.

Ed.: N. P. Onishchenko; Tech. Ed.: M. S. Gornostaypol'skaya; Chief Ed.: Mashgiz (Southern Dept.): V.K. Serdyuk, Engineer.

PURPOSE: This book is intended for engineering and technical personnel concerned with the research, production, and uses of enamel.

COVERAGE: This collection of articles on enamels and enameling processes is based on material presented at the first Ukraine-wide conference on the production of enamel and enameled equipment, organized by the State Scientific Technical Committee of the Ukrainian SSR, the Kiyev Sovnarkhos, Chemical

Card 1/4

Enamels and Enameling Processes

807/5583

17

Society imeni Mendeleev, Scientific Technical Society of the Machine-Building Industry, and other sovmarkhozes, scientific research institutes, and planning organizations. [The name, place, and date of the conference are not given.] The following are discussed: old and new types of enamels, their composition, properties, uses, and methods of production; the production of enameled equipment (chemical apparatus, pipes, cisterns, etc.), and their use in the coal, chemical, food, and other industries; latest advances in the mechanization of enameling processes and techniques; the effect of underlying surfaces on the quality of enamel coatings; and methods of modifying the properties of enamel coatings, e.g., increasing their chemical stability. American and Chinese practices and production are also briefly discussed. No personalities are mentioned. There are 32 references: 22 Soviet, 7 English, and 3 German.

TABLE OF CONTENTS:

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Smirnov, N. B. Prospects for Developing and Methods of Improving the Enamel Industry in the Urals, Siberia, and the [Soviet] Far East	11

Card 2/4

Enamels and Enameling Processes	807/5583	9
Ignatovich, I. I. Use of Enamel Coatings in Various Industries		80
Azarov, K. P., S. B. Grechanova, N. A. Kir'yanova, and Ye. M. Chistova. Studies in the Field of Aluminum Enameling		88
Azarov, K. P., and S. I. Goncharov. Mechanization of Enameling Processes		97
Savchenko, V. I. (Deceased). Centralized Production of Vitreous Enamels		103
Antonova, Ye. A. Production of Enamelled Articles in the Chinese Peoples Republic		106
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AVAILABLE: Library of Congress		
Card 4/4		

JA /dk/mas
10-6-61

L 16281-66 F.T(m)/E.P(w)/T/E.P(k)/E.P(t)/STI I.P(c) JD/AN
ACC NR: AP5025328

SOURCE CODE: UR/0126/65/020/003/0424/0427

AUTHOR: Zubov, V. Ya.; Grachev, S. V.; Rybakova, M. F.; Kir'yanova, N. P.

110
38
12

ORG: Ural Polytechnic Institute im. S. M. Kirov (Ural'skiy politekhnicheskiy institut)

TITLE: Problems of "heredity" of properties from thermomechanical treating of steel

18

SOURCE: Fizika metallov i metallovedeniye, v. 20, no. 3, 1965, 424-427

TOPIC TAGS: mechanical heat treatment, spring steel, metal property, annealing, tempering, durability, elasticity, hardness, toughness

ABSTRACT: The effect of additional tempering and annealing on thermomechanically treated samples of spring strip was studied and the secondary treatment was shown to eliminate the favorable effects of the thermomechanical process. Samples of 0.4 x 4mm EI142 and U7A steel strip were austenized at 900C, precooled at 320C, rolled, and additionally austenized at 860C and 7.2 m/min rate for approximately 30 sec, or at 860C in oil. Prior to the additional tempering some samples were annealed at 450-550C or at 300C. All samples, either after the primary thermomechanical treatment or after the additional heat treatment, were annealed 1-5 min at 200-500C and tested for strength, elasticity, toughness, and hardness. Samples, which had been tempered and annealed, but not mechanically treated, were similarly tested.

Card 1/2

UDC: 689.14.018.295

L 45204-0

ACC NR: AP5025328

Additional heat treating decreased the mechanical properties and the amount of residual austenite to the level of strips obtained by ordinary heat treating. Thus, no retention of favorable properties occurs in the additional tempering process, whereas some unfavorable properties are preserved, causing an increase in brittleness at low annealing temperatures. Orig. art. has: 4 figures and 1 table.

SUB CODE: 11/ SUBM DATE: 24Sep64

/ ORIG REF: 009/ OTH REF: 001

Card 2/2

ZUBOV, V.Ya.; GRACHEV, S.V.; HYBAKOVA, M.F.; KIR'YANOVA, N.P.

"Hereditary" properties of thermomechanically treated steel.
Fiz. met. i metalloved. 20 no.3:424-427 S '65.

(MIRA 18:11)

1. Ural'skiy politekhnicheskii institut imeni S.M.Kirova.

18(7), 18(1)

AUTHORS:

Shteynberg, M. M., Kir'yanoza, N. P., SOV/163-58-4-32/47
Shklyar, R. Sh, Malinov, L. S.

TITLE:

Investigation of Aging and Mechanical Properties of Beryllium
Bronze (Issledovaniye stareniya mekhanicheskikh svoystv
berilliyevoy bronzy)

PERIODICAL:

Nauchnyye doklady vysshey shkoly. Metallurgiya, 1958, Nr 4,
pp 189 - 192 (USSR)

ABSTRACT:

The investigation concerned aging and mechanical properties of the beryllium bronze as well as the influence of cold plastic deformation on notch impact strength and hardness of the bronze. The X-ray structure investigation of the aging of beryllium bronze with 2.05% Be showed that decomposition of the α -solution can take place in two phases as well as in one phase. At aging temperatures of 200 and 250° decomposition occurs in two phases and is distinctly to be seen in the X-ray diagrams after aging for 2 hours, or 30 minutes, respectively. At an increase of the aging time up to 8 hours at 200°, and up to 4 hours at 250°, the characteristics of the one-phase decomposition begin to show at the same time.- As from 300°, decomposition shows one-phase character. An inc-

Card 1/3

Investigation of Aging and Mechanical Properties
of Beryllium Bronze

SOV/163-58-4-32/47

rease in the lattice period of the α -solution is observed after aging for more than 6 minutes at 300°, for over 2 minutes at 350°, and for over 30 seconds at 400°.- The line of the new phase (γ -phase) is clearly visible in the X-ray diagrams only after aging at 350°.- At the temperatures of two-phase decomposition and at 300°, where the decomposition starts to be one-phase, the electric resistance increases as compared with the one in the hardened state.- Plastic cold deformation greatly speeds up the two-phase decomposition. An intense change in the mechanical properties of bronze begins at 200°, i.e. at the temperature where a two-phase decomposition of the α -solution is ascertained by the X-ray structure analysis. With an increase in the aging temperature, the proportionality limit, the breaking limit, the hardness and the initial factor of consolidation increase while the relative stretching, the compression of the cross section and the notch impact strength decrease. At an aging temperature of 350°, these properties reach their extreme values; at a further rise in temperature, they begin to change in the opposite direction.- The final factor of consolidation

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Investigation of Aging and Mechanical Properties
of Beryllium Bronze

SOV/163-58-4-32/47

(at the end of consolidation) undergoes rather little change in dependence on temperature and aging time. Aging for two hours at 350° gives the maximum strength properties. Retarded cooling after aging, as from 450°, leads to the mentioned increase in strength properties and to the reduction of plasticity and, in particular, of the notch impact strength, as compared with accelerated cooling in water.- At otherwise equal strength properties, a bronze aged at under 350° has a higher notch impact strength than a bronze aged at over 400°. Plastic deformation leads to a certain increase in notch impact strength, both before and after aging. The increase in notch impact strength is particularly great when the plastic deformation occurs before or after aging at the temperatures of two-phase decomposition (200 and 250°). There are 3 figures and 1 Soviet reference.

ASSOCIATION: Ural'skiy politekhnicheskiy institut (Ural Polytechnic Institute)
SUBMITTED: October 4, 1957

Card 3/3

18. 1220

32622

S/137/61/000/011/094/123
A060/A101

AUTHORS: Shteynberg, M. M., Kir'yanova, N. P., Shklyar, R. Sh., Malinov, L.S.

TITLE: Ageing kinetics and mechanical characteristics of beryllium bronze

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 11, 1961, 24, abstract
111149 (V sb. "Probl. metalloved. i term. obrabotki", no. 2,
Moscow - Sverdlovsk, Mashgiz, 1960, 143-167)

TEXT: By means of an X-ray structure investigation it was established that in the process of ageing of Be-bronze containing (in %): Be 2.05, Ni 0.40, Fe 0.08, Si 0.12, the decomposition of α -solid solution may take place both by the 2-phase (at 200 - 250°C) and by the single phase ($\geq 300^\circ\text{C}$) process. The lines of the new phase (γ) appear after ageing at 350°C. Ageing at temperatures $< 300^\circ\text{C}$ raises the ρ of the bronze as result of the considerable faults in the crystal lattice. At the temperatures of the single phase decomposition one observes a considerable lowering of ρ with a simultaneous attainment of the maximum of the crushing stress: 2-hr ageing at 350° yields σ_b of 136 kg/mm², σ_p 115 - 120 kg/mm² and H_B 300 - 370. The ductility and a_k of the alloy are very low. The intense lowering of the strength characteristics, raising of the

Card 1/2

32-22

S/137/61/000/011/094/123

A060/A101

Ageing kinetics and mechanical characteristics ...

δ , ψ , a_k , and the sharp lowering of ρ after ageing at temperatures $\geq 400 - 450^\circ\text{C}$ are the result of coagulation of the separated particles of the γ -phase, of the enlargement of grains and grain blocks, and also of the coherence disturbance on the phase separation boundary. Slow cooling from a temperature $\geq 400^\circ\text{C}$ strengthens the alloy as compared to water hardening. At equal strength characteristics, ageing at temperatures $< 350^\circ$ yields a higher a_k than at $> 450^\circ\text{C}$. Cold plastic deformation of hardened alloy considerably accelerates the 2 phase decomposition and raises the a_k and the brittle strength. A double ageing at 250°C with cold plastic deformation before the second ageing ensures the same strength characteristics as does ageing at 300°C , but the a_k is raised by a factor of 2. Lower strength characteristics but also a lower tendency to brittle failure are possessed by Be-bronze aged at $250 - 300^\circ\text{C}$ in combination with cold plastic deforming. Ageing at temperatures $> 400^\circ\text{C}$ is undesirable, since it lowers the brittle strength of the alloy.

G. Tyurin

[Abstracter's note: Complete translation]

Card 2/2

PIK'YANOVA, O.D.

Plants as nesting materials of the lesser suslik [with summary in English]. Zool. zhurn. 36 no.8:1263-1265 Ag '57. (MIRA 10:9)

1. Zapadno-Kazakhstanskii otdel Geograficheskogo obshchestva SSSR.
(West Kazakhstan--Susliks)

KIR'YANOVA, O.S.; POKUSATSEV, N.I.; TSARENKO, A.P., inzhener, redaktor;
YUDZON, D.M., tekhnicheskiy redaktor.

[Developing and inculcating technological processes on a branch
railroad; experience of the Kashira branch of the Moscow-Kursk-
Donbass railroad] Razrabotka i vnedrenie tekhnologicheskogo pro-
tssesa raboty otdeleniia deregi; opyt Kashirskogo otdeleniia
Moskovsko-Kursko-Donbasskoi deregi. Moskva, Gos.transp. shel-der.
izd-vo, 1953. 71 p. [Microfilm]. (MIRA 9:6)
(Railroads)

KIR'YANOVA, O.S., kandidat tekhnicheskikh nauk.

On the possibility of lowering costs of shunting in hump yards.
Zhel.dor.transp. 37 no.10:38-41 O '55. (MLRA 9:1)

(Railroads--Switching)

KIR'YANOVA, O.S., kand. tekhn. nauk; LEPNEV, M.I., kand. tekhn. nauk.

How to improve graphic train sheets. Zhel. dor. transp. 41
no.1:25-30 Ja '59. (MIRA 12:1)
(Railroads--Traffic)

KIR'YANOVA, Ol'ga Semenovna; kand.tekhn.nauk; LEPNEV, Mikhail Ivanovich,
kand.tekhn.nauk; MIL'DVART, M.D., inzh., red.; BOBROVA, Ye.N.,
tekhn.red.

[Improving train sheets] Sovershenstvovanie grafika dvizheniia
poezdov. Moskva, Vses.isdatel'sko-poligr.ob'edinenie M-va putei
soobshcheniia, 1960. 118 p. (MIRA 13:5)
(Railroads--Traffic)

KIR'YANOVA, O.S., kand.tekhn.nauk, dotsent

Economics of switching operations in hump classification yards:
Trudy MIIT no.113:23439 '59. (MIRA 14:5)
(Railroads—Hump yards)

KIR'YANOVA, O.S., kand.tekhn.nauk; CHERNISH, A.A.; MANYUKOV, G.S.

Organization of the transport of local freight on sections with
lengthened haul distances. Zhel.dor.transp. 44 no.9:77-81 8
'62. (MIRA 15:9)

1. Zamestitel' nachal'nika sluzhyby dvizheniya Moskovskoy dorogi
(for Chernysh). 2. Glavnyy inzh. sluzhby dvizheniya Moskovskoy
dorogi (for Manyukov).

(Railroads--Freight) (Railroads--Management)

KIR'YANOVA, O.S., kand. tekhn. nauk

Selecting the efficient number of stops for local freight trains.
Vest. TSNII MPS 23 no.5:41-44 '64.

(MIRA 17:11)

KIR'YANOVA, T.M.

2

05853

5(2)

SOV/78-4-11-6/50

AUTHORS:

Kalinichenko, I. I., Nikitin, V. D., Stromberg, M. R.,
Kir'yanova, T. M., Kotyayeva, K. A.

TITLE:

The Dissolution of Nickel in Nitric Acid

PERIODICAL:

Zhurnal neorganicheskoy khimii, 1959, Vol 4, Nr 11,
pp 2443-2448 (USSR)

ABSTRACT:

The authors investigated the influence exerted by temperature, acid concentration and additions upon nickel dissolution and the composition of decomposition products of nitric acid. Experiments were made at 60, 80, and 100°C. Figures 1-3 and table 1 indicate the dissolution rate of Ni in 0.42 n - 12 n solution of HNO₃. Temperature rise accelerates the dissolution. At constant temperature and increasing acid concentration, the dissolution rate rises up to a certain acid concentration, and is then reduced again at higher acid concentrations due to passivation. For 60°C, the dissolution rate has a maximum at an acid concentration of 6.5 - 7 n, for 80°C it is found at 8.5 - 9 n, and for 100°C at concentrations of above 9.0 n. Passage of oxygen had no effect within the temperatures and concentrations ap-

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05853

SOV/78-4-11-6/50

The Dissolution of Nickel in Nitric Acid

plied. Analysis of nitric acid on ammonium nitrate has shown that the quantity of the resultant NH_4NO_3 was almost independent of temperature and remained fairly constant within the concentration range 0.46 - 7 n of nitric acid. About 90% of the amount of ammonium nitrate expected from the equation $4\text{Ni} + 10\text{HNO}_3 =$

$= 4\text{Ni}(\text{NO}_3)_2 + \text{NH}_4\text{NO}_3 + 3\text{H}_2\text{O}$ was produced in this reaction.

Figures 4 and 5 show the effect of the added hydrogen peroxide, ferrinitrate and nickel nitrate as well as of mixtures of these three compounds. Addition of H_2O_2 accelerates nickel dissolution by 2 - 2.5 times, while the formation of NH_4 salts is reduced to one-third at 40°C and to 16% approximately at 100°C .

$\text{Fe}(\text{NO}_3)_3$ accelerates the dissolution of Ni only above 60°C , whereas $\text{Ni}(\text{NO}_3)_2$ diminishes the dissolution rate to one-half between 40 and 60°C . At higher temperatures its effect decreases. $\text{H}_2\text{O}_2 + \text{Fe}(\text{NO}_3)_3$ and $\text{H}_2\text{O}_2 + \text{Ni}(\text{NO}_3)_2$ increase the dissolution rate of Ni up to 60°C . At higher temperatures, rapid catalytic decomposition of H_2O_2 takes place so that only the afore-men-

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The Dissolution of Nickel in Nitric Acid

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tioned effect of nitrates occurs. There are 5 figures,
2 tables, and 14 references.

ASSOCIATION: Ural'skiy politekhnicheskiy institut im. S. M. Kirova (Ural
Polytechnical Institute imeni S. M. Kirov)

SUBMITTED: July 11, 1958

Card 3/3

PINSKER, A.Ye.; KIR'YANOVA, T.V.; OGILY, I.I.

Removal of organic sulfur compounds from the ethylene fraction
of coke oven gas by means of polyalkyl benzenes. Khim. prom.
no.2:92-94 F '64. (MIRA 17:9)

PINSKER, A.Ye.; OGIY, L.L.; KIR'YANOVA, T.V.

Complex purification of the ethylene fraction of coke-oven
gas by organic solvents. Khim. prom. 41 no.10:737-738 0 '65.
(MIRA 18:11)

ACCESSION NR: AP4043388

S/0181/64/006/008/2530/2533

AUTHORS: Kir'yanova, V. M.; Khukhryanskiy, Yu. P.; Shchevelev, M. I.

TITLE: Dislocations in recrystallized layers of p-type germanium

SOURCE: Fizika tverdogo tela, v. 6, no. 8, 1964, 2530-2533

TOPIC TAGS: recrystallization, dislocation formation, germanium, indium

ABSTRACT: The authors investigated, apparently for the first time, the dependence of the dislocation density in a recrystallized layer of p-type germanium doped with indium on the rate of cooling of samples during the formation of the crystallized layer. The dislocation density in the initial germanium ranged from 2.5 to $7.4 \times 10^9 \text{ cm}^{-2}$. The results show that the dislocation density in the recrystallized layer is approximately 1.5--2 times larger than in the original germanium, in the cooling-rate interval from 200 to

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ACCESSION NR: AP4043388

10°C/min, and does not depend on either the cooling rate or on the dislocation density in the initial germanium. A brief theoretical explanation of the phenomenon is presented in light of several proposed mechanisms for the formation of the crystallized layer. It is emphasized in the conclusion that the results are tentative and call for much further study. Orig. art. has: 1 figure and 1 table.

ASSOCIATION: Voronezhskiy politekhnicheskiy institut (Voronezh Polytechnic Institute)

SUBMITTED: 16Dec63.

ENCL: 00

SUB CODE: 88

NR REF SOV: 003

OTHER: 003

Card 2/2

S/137/61/000/005/015/060
AC06/A106

AUTHOR: Kir'yanova, V.M.

TITLE: The effect of the degree of reduction of flat aluminum specimens on strength and microhardness

PERIODICAL: Referativnyy zhurnal. Metallurgiya, no. 5, 1961, 9, abstract 5D88 ("Zap. Voronezhsk. s-kh. in-ta", 1959, v. 28, no. 2, 423 - 425)

TEXT: Grade "Al", 2 mm thick, aluminum sheets were investigated. Rolling was performed on "Levis" rolls assuring constant rolling speed and high accuracy of regulating the thickness. The experimental results were used for the plotting of graphs on changes in σ_b , δ and microhardness depending on the degree of reduction. The graphs show that σ_b and microhardness increase with higher reduction, whereas δ decreases. ✓

V. P.

[Abstracter's note: Complete translation]

Card 1/1

GURSKIY, Yevgeniy Ivanovich; YERSHOVA, Vera Vasil'yevna; IVANOVA, I.L.
retsenzent; KIR'YANOVA, V.M., retsenzent; NAKHIMOVSKAYA, A.N.,
retsenzent; KOLOBOV, A.M., retsenzent; CHERKAS, L.A.,
retsenzent; SHERDYUKOVA, S.I., red.

[Fundamentals of linear algebra and analytic geometry] Osnovy
lineinoi algebrы i analiticheskaya geometriya. Minsk, Vys-
shaya shkola, 1965. 262 p. (MIRA 18:9)

YEREMIN, S.A.; KIR'YANOVA, V.M.; SHCHEVELEV, M.I.

Effect of inherent dislocations in alloyed p - n-junctions on the
duration of transients. Izv. vys. ucheb. zav.; fiz. 8 no.2:23-27
'65. (MIRA 18:7)

1. Voronezhskiy politekhnicheskii institut.